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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/748,504  | 12/30/2003  | Karl Kennedy         | 04362 (3883.00035)  | 7257             |
| 35374   | 7590        | 09/19/2005           | EXAMINER            |                  |
| LEAR CORPORATION, BLISS MCGLYNN, P.C.<br>2075 WEST BIG BEAVER ROAD<br>SUITE 600<br>TROY, MI 48084 |             |                      | CROSLAND, DONNIE L  |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2636                |                  |

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                                |                                |  |
|------------------------------|--------------------------------|--------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/748,504  | Applicant(s)<br>KENNEDY ET AL. |  |
|                              | Examiner<br>DONNIE L. CROSLAND | Art Unit<br>2636               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/21/04; 1/24/05; 2-7-05.</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: On page 13 of the specification, there is two blank serial numbers. Applicants are required to fill in the blanks.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 3, "the output" has no antecedent basis.

In claim 5, lines 3 and 5, "the number of times" has no antecedent basis; line 7, "the set of training samples" has no antecedent basis; line 9, "the output units" has no antecedent basis.

In claim 12, line 3, "the analog output" has no antecedent basis; line 4, "the analog sensor array output" has no antecedent basis; line 5, and "the vector expression" has no antecedent basis.

### ***Allowable Subject Matter***

Claims 1-12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: Claim 1 recites the combination and includes applying the sensor array output

as a vector representation to a neural net that was trained using a learning vector quantization algorithm.

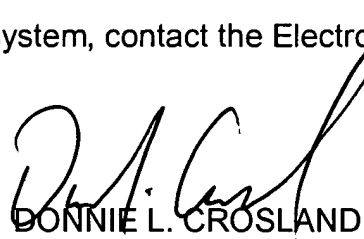
Claim 5 recites the method combination and includes processing the set of training samples through a neural network the determined number of times using the first learning vector quantization algorithm; adjusting one of the output units of the neutral net each time one of the training samples is processed using the first learning vector quantization algorithm; processing the set of training samples through the neural network the determined number of times using the second learning vector quantization algorithm and further recites storing the adjusted output units as the final trained values for the neural net.

Claim 12 recites the method steps of converting the analog sensor array output into a digital vector expression and applying the vector expression to a trained neural net having a predetermined learning vector quantization algorithm, recognizing, determining, and continuously reinitiating the method steps to redetermine the classification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNIE L. CROSLAND whose telephone number is 571-272-2980. The examiner can normally be reached on Mon-Fri, 9:30a-6:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JEFFERY HOFSSASS can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DONNIE L. CROSLAND  
Primary Examiner  
Art Unit 2636

Dlc  
9-15-05